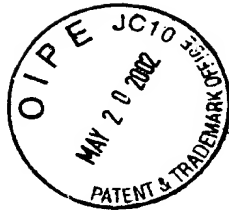


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RESPONSE UNDER 37 CFR 1.116  
EXPEDITED PROCEDURE  
EXAMINING GROUP 2811

PATENT APPLICATION  
Do. No. 5484-48

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Byung-Sup SHIM, et al.

Serial No. 09/305,240

Examiner: Nadav. Ori

Filed: May 4, 1999

Group Art Unit: 2811

For: **OPEN DRAIN INPUT/OUTPUT STRUCTURE AND MANUFACTURING  
METHOD THEREOF IN SEMICONDUCTOR DEVICE**

BOX AF  
Assistant Commissioner for Patents  
Washington, D.C. 20231

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AMENDMENT AFTER FINAL REJECTION UNDER 37 CFR 1.116

Responsive to the Final Office Action, dated of February 13, 2002 and Advisory  
Action, dated April 19, 2002, please amend the application as follows.

IN THE CLAIMS

E1  
SUB  
P1

5. (Twice Amended) A pull-up transistor disposed between a Vdd terminal and an I/O pad of a semiconductor device comprising:  
a semiconductor substrate of a first conductive-type;  
a source region and a drain region of a second conductive type formed in the substrate and defining between them a channel region, one of the source region and the drain region being electrically coupled to the I/O pad, the other one of the source region and the drain region being electrically coupled to the Vdd terminal;  
an impurity implantation region of impurities of a second conductive-type formed in a first sector of the channel region, the first sector not reaching either one of the source region and the drain region;  
the impurity implantation region of the first sector comprising a surface region operable under field effect as a depletion channel;